



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/790,745      | 03/03/2004  | Yi-Chu Wu            | 2450-0642P          | 2893             |

2292 7590 08/17/2006

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

HINES, ANNE M

ART UNIT PAPER NUMBER

2879

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/790,745

Applicant(s)

WU ET AL.

Examiner

Anne M. Hines

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on June 7, 2006, has been entered and acknowledged by the Examiner.

Claims 1-4 are pending in the instant application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Anandan (US 2005/0007517).

Regarding claims 1-4, Anandan discloses a metal electrode layer for supplying voltage and has a reflecting surface (Fig. 1, 5; Page 2, Paragraph [0030]; Fig. 3, 32; Page 3, Paragraph [0034]); an organic light-emitting diode layer disposed above the metal electrode and driven to emit light by supplying a voltage to the metal electrode (Fig. 1, 4; Page 2, Paragraph [0030]; Fig. 3, 32; Page 3, Paragraph [0034]); a phase transforming film disposed above the organic light-emitting diode wherein the phase transforming film is a twisted nematic cell having a retardation state of a quarter-wave

Art Unit: 2879

phase difference (Fig. 2, 200; Page 3, Paragraph [0033]; Fig. 3, 31; Page 3, Paragraph [0034]) that can be converted to have a retardation state with zero phase difference; and a polarizer disposed above the phase transforming film (Fig. 2, 25; Page 3, Paragraph [0033]; Fig. 3, 31; Page 3, Paragraph [0034]).

Regarding claim 1, note that the phrases “and driven to emit light by supplying a voltage to the metal electrode,” “can be converted to have a retardation state with zero phase difference,” and “having a retardation state of quarter-wave phase difference” are directed to the capability of the elements to perform the recited function, the recitations are not a positive limitation but only requires the ability to so perform. As such, since the Anandan reference discloses all of the claimed structural elements, the Examiner considers the claims to be fully anticipated by Anandan.

Regarding claims 3 and 4, note that both claims are considered as claims to a method of operating the device of claim 1. Since the Anandan reference has all of the claimed structural elements of claim 1, the Examiner considers claims 3 and 4 to be fully anticipated by Anandan.

### ***Response to Arguments***

Applicant's arguments filed June 7, 2006 have been fully considered but they are not persuasive.

Applicant argues with regard to claim 1 that the Anandon reference fails to disclose a phase transforming film having a retardation state of a quarter-wave phase difference that can be converted to have a retardation state with zero phase difference.

The Examiner respectfully disagrees. Anandon discloses a twisted nematic cell, which inherently has a retardation state of a quarter-wave phase difference that can be converted to have a retardation state with zero phase difference. A twisted nematic cell operates such that in an unexcited state light polarized parallel to the direction of alignment at the entrance to the cell will exit the twisted nematic cell with a polarization rotated by 90° (i.e. a quarter-wave phase difference), when a voltage is applied to the electrodes, the twisted nematic cells align such that the light is not rotated as it exits the cell (i.e. a zero degree phase difference) (see US 6792175, Column 8, lines 29-45).

Applicant also argues that, unlike Anandon, the applicant's invention does not need an internal polarizer.

The Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., lack of internal polarizers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne M Hines  
Patent Examiner  
Art Unit 2879

*Amitt*  
*8/8/06*

*ms*  
**MARICELI SANTIAGO**  
**PRIMARY EXAMINER**